

Ernst & Young LLP

**SBC Illinois
Illinois 271 Performance
Measurement Examination**

Supplemental Report

**Operational Support Systems (OSS)
Performance Measurement Examination
For the months of March, April, and May 2002**

January 17, 2003

SBC Illinois 271 Performance Measurement Examination

Background

In October 2002, SBC Ameritech (“AIT”) requested Ernst & Young LLP (“E&Y”) to expand on our existing engagement to examine Michigan Bell Telephone Company’s compliance with the Michigan Business Rules¹ for March, April, and May 2002. AIT requested that we expand our engagement in order to report on Illinois Bell Telephone Company’s (the “Company”) compliance of reported performance measures with the approved business rules in accordance with the Illinois Commerce Commission’s Tariff: ILL CC. No. 20 - Part 2 - Section 10 - Section E, and referred to as Version 1.8_09_2001 (“Business Rules”) for the months of March, April, and May 2002. The purpose of this engagement is to evaluate whether the Company’s performance results were calculated and reported accurately and in compliance with the Business Rules. This independent assessment was performed in accordance with the Illinois Commerce Commission’s (“ICC”) Master Test Plan, Version 2.0, dated May 2, 2002. To accomplish this objective, E&Y performed the following attestation examination engagements in accordance with the attestation standards established by the American Institute of Certified Public Accountants:

1. Attestation Examination of the Accuracy and Completeness of the Company’s Performance Measurements for the Months of March, April, and May 2002 Accordance With the Business Rules and Management’s Assertion² Regarding Corrective Actions Implemented by the Company (“Compliance Report”).
2. Attestation Examination of the Effectiveness of Controls Over the Company’s Process to Calculate Performance Measurements for the Months of March, April, and May 2002 (“Controls Report”).

Reports listed in 1 and 2 cover the following Master Test Plan Sections: certain aspects of PMR 1 (data collection only), and all of PMR 4 and PMR 5. The reports covered the 150 Performance Measurements (“PMs”), as contained in the Business Rules.

¹ “Michigan Business Rules” refer to Version 1.8_05_20_02 of the Ameritech Performance Measure User Guide as set forth in the Michigan Public Service Commission Order in Docket U-11830, as amended.

² “Management’s Assertion” or “Report of Management” refers to the Report of Management on Compliance With the Illinois Performance Measurement Business Rules and Corrective Action Implemented attached to E&Y’s Compliance Report as Attachment A.

The reports listed above were based on the following testing approach developed and implemented by E&Y. The testing procedures were performed for all five AIT states with state-specific testing applied when state-specific differences existed in the Business Rules.

- a. Testing Approach for March, April, and May 2002 results included:
 - i. Documentation of the Process and Controls to Capture, Calculate, and Report Each Performance Measurement.
 - ii. Site Visits and Testing of Processes to Capture PM Data.
 - iii. Program Code Review – Review of Code to determine Business Rules were appropriately applied.
 - iv. Transaction Testing – Statistical sampling of transactions for each performance measurement category to verify that raw data from the source systems was appropriately processed (i.e., Business Rules coding was appropriately applied and data was accurate) and captured in the PM reporting files (i.e., appropriately included/excluded in PM).
 - v. Recalculations – Utilizing Detailed Processed Data Files (i.e., after application of Business Rules), E&Y recalculated the numerator, denominator, and result for each level of disaggregation for each PM reported upon. Additionally, E&Y recalculated the corresponding z-scores for the month of May 2002.
 - vi. Analytical Review – Fluctuations in each PM disaggregation were analyzed to determine the reasonableness of reported results.
- b. Testing Approach for corrective actions implemented and assertions made by the Company included:
 - i. Site Visits and Testing of Processes to Capture PM Data.
 - ii. Program Code Review – Review of Company programming code changes to determine that Business Rules were appropriately applied.
 - iii. Transaction Testing – Random sampling of transactions or automated testing for each corrective action implemented by the Company to verify that raw data from the source systems was now appropriately processed to correct the exception noted in E&Y's report (i.e., Business Rules coding was appropriately applied and data was accurate) and captured in the PM reporting files (i.e., appropriately included/excluded in PM). This was performed for either the restatement of PMs previously reported or through initial PM reporting in subsequent months.
 - iv. For issues and related PMs for which the Company asserted that no corrective action had been implemented by the date of E&Y's Compliance Report, and for which no restatement of previously reported PMs are considered to be necessary, E&Y tested the

supporting analyses, documentation, and rationale to validate the Company's assertion.

- c. The scope of our examination did not include Management's Assertion regarding corrective actions taken relating to items classified in Section III of the Report of Management on Exceptions Corrected But Not Yet Reported.
- d. For issues and PMs disclosed in Attachment B of the Report of Management where the Company's interpretation of the Business Rules did not appear to follow a literal reading of the Business Rules, E&Y compared the interpretation to the draft red-lined version of the business rules provided by the Company where the interpretation was planned to be submitted to the state commission for adoption.

Scope and Approach Summary

From July 2002 through the date of the Compliance Report, E&Y performed procedures necessary to evaluate and validate the data collection processes used by AIT in reporting on its PMs for all five AIT states, including Illinois, for the months of March, April, and May. E&Y's testing did not evaluate or determine whether AIT has "passed" specific PMs. Rather, E&Y's testing focused on whether the underlying processes AIT utilized to collect and process data used in measuring its performance was accurate in all material respects in accordance with the Business Rules.

For PMs based on mechanized systems, E&Y's approach included a review of the underlying programming code, as well as transaction testing of the underlying data. As a result of this type of approach, error conditions not otherwise uncovered through transaction testing samples are subjected to the testing processes involved in programming code verification.

The evaluation of the adequacy of data integrity was a critical element of the examination procedures. Accordingly, E&Y performed examination procedures in many different areas impacting data integrity, including both manual and electronic original data sources entering the source systems for processing and ultimately, inclusion in the calculation of PMs. E&Y's approach to the data integrity examination included four key areas: (1) Process Flows and Activity Dictionaries, (2) Site Visits, (3) Interface Evaluation and (4) Transaction Testing. The procedures employed allowed E&Y to understand and test the sources of data, the processing and control of such data, and the validity of data entering the source systems. It was the results achieved from the performance of all of the procedures, described in more detail below, that provided the basis for evaluating and relying on the Company's data integrity controls and allowed for E&Y to issue the examination report on the effectiveness of the controls over the accuracy and completeness of reported data.

Scope and Approach

E&Y's examination tested the Operational Support Systems ("OSS") utilized by AIT and competing local exchange carriers ("CLECs") for processing transactions, systems used for collection of PM data, and the PM reporting systems. In addition, the examination included a review of the manual processes utilized by AIT in generating PMs.

The examination covered the 150 PMs as identified in the Business Rules (see Appendix A for a listing of PMs included in the scope of the engagement). The procedures performed were in accordance with the ICC's Master Test Plan as outlined below.

Process Flows and Activity Dictionaries – Understanding, Evaluating and Testing Systems

E&Y's initial procedures employed in executing an examination is gaining an understanding of transactional processing and controls employed to ensure all data is:

- received,
- recorded and valid,
- accumulated and classified appropriately,
- secure and only subject to change when appropriate, and
- reported accurately.

Accordingly, E&Y's examination included gaining an understanding of two key initial sources of data, manual entry and electronic interface, as well as the controls surrounding such. Because there are two key sources of data, manual and electronic, different examination procedures were employed. However, regardless of the data source, procedures for the evaluation of the data sources and the related controls are necessary.

For the PMs identified in Appendix A, E&Y validated the integrity of data used throughout the PM generation process by reviewing each of the significant applications where data originates, was stored, or was reported. For each application, E&Y identified the various transaction types and systems utilized that directly impact the reported PMs. Upon identification of transaction types, E&Y then determined how each transaction type was initiated, captured by the Company's Operations Support Systems ("OSS"), and processed through the Company's OSS and PM reporting systems. This process also identified where and how the Company applied the Business Rules to each transaction and which intermediate applications house specific PM information.

Once the above information was obtained for each PM under review, E&Y created process flowcharts and activity dictionaries. The purpose of the process flows was to document E&Y's understanding of the data flow for each PM and each transaction type. The purpose of the activity dictionaries was to provide supplemental information regarding the process flows identifying critical controls and data inputs and outputs to each system utilized throughout the PM process. The procedures performed in

developing the process flows and activity dictionaries are covered in Master Test Plan Sections PMR 1 (data collection only), PMR 4, and PMR 5.

Corrective Action Process Review

For corrective actions implemented by the Company to address issues identified in testing of March, April, and May 2002 relating to PMs that are generated with manual processes, E&Y validated the newly implemented processes used in the PM generation process by reviewing the revised methods and procedures for each issue and interviewing key Company subject matter experts. For each process, E&Y verified that the new procedures addressed the identified issue. E&Y determined how each transaction should now be processed using the revised procedures in the Company's PM reporting systems. This process review also assessed whether corrective action implemented by the Company adequately addressed reported issues.

Site Visits – Manual Data Input

Manual data is entered at various physical locations throughout the Company. Accordingly, it was necessary for E&Y to conduct site visits, described fully below, to observe and validate data inputs occurring at the manual source. For the PMs identified in Appendix A, E&Y identified all manual processes utilized by the Company in generating performance measures. E&Y then performed site evaluations at the Company's Local Operations Center, Local Service Centers, Maintenance Centers, and retail call centers and field visits with the Company technicians within Illinois (see Appendix C). During these visits, E&Y observed various transactions including the process by which customers switch local telephone service providers, the service order entry process, issuance of trouble tickets to the field forces, and the manner in which the Company's technicians actually complete their assigned work and code transactions within the system, including the assigning of jeopardy codes. Additionally, during these visits E&Y interviewed location managers and obtained relevant operational documentation including education and training policies and procedures, quality assurance policies and procedures, and employee hiring and review processes and procedures.

The purpose of the site visit was to document E&Y's understanding of the manual processes and procedures and to identify and document controls over these manual processes of data input. Additionally, the transaction observation data collected by E&Y during the site visit was used to validate the transaction information in the Company's front-end systems. Errors noted in this testing are described in E&Y's Compliance Report and the Report of Management. The procedures performed in developing the site visit tests and the transaction tests performed covered Master Test Plan Sections: PMR 1 (data collection only) and PMR 4.

Performance Measure Code Review – Interface Evaluation – Mechanized Data Input

In many instances, data entering the Company's systems is a result of electronic data interfaces existing between the Company's systems and competitive local exchange

carriers ("CLECs"). As such, the evaluation of controls surrounding the involved interfaces is critical to understanding whether data is being appropriately received and controlled. Therefore, for electronic data, E&Y evaluated the mechanized controls existing between the CLECs and the Company, as well as mechanized controls that exist once the data is received by the Company's systems. E&Y's evaluation consisted of mechanized interface control level reviews to verify control existence and operation.

In relation to the PMs in Appendix A, E&Y reviewed the respective programming code that contained the Business Rules (exclusions, inclusions, calculation of the numerator and denominator, and disaggregation rules) within the front-end, intermediate, or reporting systems. E&Y tested the corresponding manual processes. E&Y compared the code and manual processes to the Business Rules for each PM to determine whether the Company's processes were designed to apply the Business Rules properly. In addition, changes made to computer program code were reviewed for propriety and to ensure processes and controls were modified to support the code changes. The procedures performed in the PM code review cover Master Test Plan Sections PMR 2, PMR 3, PMR 4, and PMR 5. Errors noted in this testing are described in Attachment A to E&Y's Compliance Report and the Report of Management.

To validate the results of the computer program code review, E&Y performed significant transaction testing and analytical review procedures as described below to determine that the program code was functioning as designed.

Corrective Action Code Review

For corrective actions implemented by the Company to address issues identified by E&Y in the testing of March, April, and May 2002, E&Y examined the applicable changes to the computer program code that contained the Business Rules (exclusions, inclusions, calculation of the numerator and denominator, and disaggregation rules) within the front-end, intermediate, or PM reporting systems. E&Y compared the computer program code to the Business Rules for each issue to determine whether the Company's implemented corrections were designed to appropriately correct the program logic responsible for the previously identified issue. In addition, all changes made to computer program code were reviewed for propriety and to ensure processes and controls were modified to support the code changes. To validate the results of this code review, E&Y performed transaction testing as described below related to the Company's corrective action to determine that the revised program code was functioning as designed.

Transaction Testing – Verification of Processing Throughout the Systems

Another primary procedure in E&Y's evaluation of the data integrity controls is transactional processing from the point of entry, whether manual or electronic, through PM reporting. For each of the applications identified through the creation of the process flows described above, E&Y identified systems that receive underlying transaction data before the Business Rules (exclusions, inclusions, calculation of numerator and denominator, and disaggregation rules) were applied (i.e., raw data). For each system and transaction type, E&Y either selected a statistical sample of transactions (described

below) from the raw data for the period under examination (i.e., March through May 2002) or, where volumes were low, performed a 100 percent validation of the PM results for the period under examination. For all samples of transactions tested, E&Y obtained the raw data directly from the Company's systems and databases. At no time did E&Y test data selected by the client.

For each sample transaction chosen, E&Y determined if the Business Rules were applied properly to either include or exclude the transaction from the PM results. For each sample transaction, E&Y manually applied the Business Rules and determined if the transaction should be included or excluded. For the sample transactions that were determined to be included in the PM result, E&Y then determined the appropriate PM level of disaggregation and reviewed the calculation of the numerator and denominator. E&Y then determined if the included sample transaction was included in the correct month and disaggregation of the posted PM results. Additionally, E&Y agreed PM-related data elements from the sampled transaction to the data included in the PM results. For those transactions that were determined to be excluded, E&Y documented why the transaction was excluded according to the Business Rules. E&Y then determined that the sampled transaction was not included in the PM results.

Transaction Testing – Statistical Sampling Approach

Based on the understanding of each PM's process flow, including systems utilized and types of transactions processed, E&Y obtained the underlying PM data for the months of March, April, and May 2002 from the relevant OSS before Business Rules were applied. Once this data was obtained, the data was then separated into wholesale and retail data for each PM (only wholesale data was obtained for PMs that were benchmark measures) in order to determine the total population size for each PM/transaction type.

If the population size is greater than 5,000 transactions, a random sample of 260 transactions is chosen in order to make the following statistical observations: If 0 errors are found in a sample of 260, there is a 93% probability that the error rate in the population is less than 1%. If 1 error is found in a sample of 260, there is a 96.7% probability that the error rate in the population is less than 2%. Finally, if the expected error rate in the sample is 1% and the tolerable error rate is 4%, a sample of 260 would provide 95% reliability or confidence.

If the population size is less than or equal to 5,000, a random sample of 40 is chosen in lieu of judgmental sample selection in order to make the following statistical observations: If a sample of 40 is reviewed and 0 errors are found, there is a 92% probability that the error rate in the population is less than 6%. If 1 error is found in a sample of 40, there is a 92% probability that the error rate in the population is less than 10%, and there is a 96% probability that the error rate in the population is less than 12%.

If error rates greater than the anticipated error rates were found during testing, E&Y considered expanding testing to determine the nature of the error and assessed the results of that testing in the planned procedures.

The procedures performed for the transaction testing covered Master Test Plan Sections PMR 4 and PMR 5.

The extent of testing and results thereof are included in Appendix B and the nature of the errors is discussed in Attachment A to E&Y's Compliance Report and Report of Management.

Corrective Action Transaction Testing

For corrective actions implemented by the Company to address issues identified by E&Y in the testing of March, April, and May 2002, E&Y identified systems that receive underlying transaction data before the Business Rules (exclusions, inclusions, calculation of numerator and denominator, and disaggregation rules) were applied (i.e., raw data). When the issue affected a mechanized system, E&Y used computer-auditing techniques to test the entire population of transactions of a selected month subsequent to the correction to verify the code changes were functioning properly. For manual issues, E&Y selected a targeted random sample of transactions from the period under examination (dependent upon the Company's assertion) or, where volumes were low, performed a 100 percent validation of the PM results for the period under examination.

To test the correction of issues affecting a mechanized system, E&Y obtained electronic source transaction data files for the affected PM before the Business Rules (exclusions, inclusions, calculation of numerator and denominator, and disaggregation rules) were applied (i.e., raw data). E&Y also obtained the corresponding electronic reporting or detail file for the affected PM after the Business Rules were applied. Leveraging information gained through PM code review procedures and interviews with operational and information technology subject matter experts, E&Y tested the correction by applying E&Y executed queries to the source data files. The results of this test were compared to the Company reporting or detail files to validate that the implemented correction was functioning correctly.

For issues where the Company made a correction to ensure that transactions were now being included in accordance with Business Rules, E&Y performed additional testing procedures to assess the completeness of those inclusions. E&Y selected an additional targeted random sample of transactions that was excluded. E&Y discussed the sample of transactions with the various subject matter experts to validate that these transactions were being properly excluded for legitimate reasons specified in the Business Rules.

Performance Measure Recalculations

For the PMs identified in Appendix A, E&Y obtained the data from the AIT intermediate systems for March, April, and May 2002 that contained the underlying data after the Business Rules were applied. E&Y then recalculated the PM results for each PM reviewed for March, April, and May 2002. Additionally, E&Y recalculated the corresponding z-scores for the month of May 2002 that did not require a permutation calculation. A sample of disaggregations that required a permutation calculation was

recalculated. Results were then compared with the results originally posted on the CLEC Web site for each month.

The recalculation of the PM results included summarizing numerator and denominator information by disaggregation and then recalculating (dividing numerator by denominator) the results. For each PM, the recalculation for each disaggregation was validated to the PM Business Rule documentation for completeness of reporting all disaggregations for a PM. The procedures performed for PM recalculation testing covered Master Test Plan Sections PMR 4 and PMR 5.

Errors noted in this testing are described in Attachment A to E&Y's Compliance Report and the Report of Management.

Performance Measure Analytical Review

For each PM reviewed, as identified in Appendix A, E&Y performed analytical reviews to evaluate the reasonableness of reported results. This review analyzed transaction volumes, fluctuations in results, and reasons for parity or out-of-parity results for the period under examination. The procedures performed for PM recalculation testing covered Master Test Plan Sections PMR 4 and PMR 5.

Errors noted in this testing are described in Attachment A to E&Y's Compliance Report and the Report of Management.

Restatement Testing

For each PM, E&Y validated the reason each restatement was made and determined if the restatement impacted the review period. E&Y reviewed the explanation of the change in the PM result, determined the impact of the restatement on the testing approach, and reported restatements as exceptions to compliance with the Business Rules in E&Y's Compliance Report. The procedures performed for the restatement testing covered Master Test Plan Sections PMR 4 and PMR 5 and certain aspects of PMR 3.

Errors noted in this testing are described in Attachment A to E&Y's Compliance Report. To the extent errors identified in E&Y's testing of March, April, and May 2002 results were restated, E&Y tested the corrective actions as described above and the restatement process to determine that results were appropriately corrected.

Reporting

The results of E&Y's procedures and testing are noted within E&Y's attestation examination reports and Report of Management. Any material³ exceptions to compliance with the PM Business Rules are detailed in the reports. Corrective action taken by the

³ Exceptions are considered to be material if the exception has greater than a plus or minus five percent impact on the reported performance measure or if parity/benchmark result is impacted.

Company (i.e., accuracy of restated results or new controls) is also reported. Separate reports were issued as noted below:

1. Attestation Examination of the Accuracy and Completeness of the Company's Performance Measurements for the Months of March, April, and May 2002 and the Accuracy of Management's Assertion Regarding Corrective Actions Implemented by the Company.
2. Attestation Examination of the Effectiveness of Controls over the Company's Process to Calculate Performance Measurements for the Months of March, April, and May 2002

The scope of our examination did not include Management's Assertion regarding corrective actions taken relating to items classified in Section III of the Report of Management on Exceptions Corrected But Not Yet Reported.